

### **ABSTRACT OF THE DISCLOSURE**

Disclosed is a receiver digital filter for a digital IF signal processor suitable for the specification of each communication standard in a communication system that supports at least one communication standard. The filter for each standard is constructed as one block, and includes a block for externally implementing the constructed block. The coefficient of the digital filter constructed in one block is implemented with an external input or an internal filter coefficient calculator by a basic filter building block. In this manner, the common resources required in the digital filter used in each communication standard are shared, and only the additionally required resources are selectively implemented. Since the shared resources are calculated by dynamic programming, a considerably smaller number of additional resources are required.